BRAIN RESEARCH

VOL. 903 NOS. 1,2 **CONTENTS** **8 JUNE 2001**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – EMBASE/Excerpta Medica – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Elsevier BIOBASE/Current Awareness in Biological Sciences. Full text available in ScienceDirect® and Neuroscion.

Announcements

Floyd E. Bloom appointed as Co-Editor-in-Chief of *Brain Research* v

Brain Research Interactive Young Investigator Awards vi

Brain Research Interactive Young Investigator Awards – October 2000 vii

Call for Papers – Gene Expression Patterns viii

Interactive report (Also accessible on the World Wide Web at **http://www.bres-interactive.com**)

Melatonin promotes sleep-like state in zebrafish
I.V. Zhdanova, S.Y. Wang, O.U. Leclair, N.P. Danilova (USA) 263

Research reports

Long-term alteration of calcium homeostatic mechanisms in the pilocarpine model of temporal lobe epilepsy
M. Raza, S. Pal, A. Rafiq, R.J. DeLorenzo (USA) 1

Par-4 is a synaptic protein that regulates neurite outgrowth by altering calcium homeostasis and transcription factor AP-1 activation
Q. Guo, J. Xie, X. Chang, X. Zhang, H. Du (USA) 13

Cellular mRNA expression of the transcription factor NGFI-B suggests a gene regulatory role in striatal opiate-peptide neurons
C. Bäckman, B.J. Hoffer, H. Misawa, M. Morales (USA, Japan) 26

Separate urinary bladder and external urethral sphincter neurons in the central nervous system of the rat: simultaneous labeling with two immunohistochemically distinguishable pseudorabies viruses
I. Nadelhaft, P.L. Vera (USA) 33

Regional expression of Bcl-2 mRNA and mitochondrial cytochrome *c* release after experimental brain injury in the rat
G.-X. Dong, D.K. Singh, P. Dendle, R.M. Prasad (USA) 45

Brainstem activates paroxysmal discharge in human generalized epilepsy
S. Kohsaka, M. Kohsaka, S. Mizukami, T. Sakai, K. Kobayashi (Japan) 53

Naloxone inhibits nicotine-induced receptor current and catecholamine secretion in bovine chromaffin cells
A.R. Tomé, V. Izaguirre, L.M. Rosário, V. Ceña, C. González-García (Portugal, Spain) 62

Co-involvement of mitochondria and endoplasmic reticulum in regulation of apoptosis: changes in cytochrome *c*, Bcl-2 and Bax in the hippocampus of aluminum-treated rabbits
O. Ghribi, D.A. DeWitt, M.S. Forbes, M.M. Herman, J. Savory (USA) 66

Nitric oxide synthase inhibitors enhance mechanosensitive Ca^{2+} influx in cultured dorsal root ganglion neurons
V.V. Chaban, J.A. McRoberts, H.S. Ennes, E.A. Mayer (USA) 74

A non-radioactive assay for the cAMP-dependent protein kinase activity in rat brain homogenates and age-related changes in hippocampus and cortex
F. Karege, M. Schwald, C. Lambercy, J.-J. Murama, M. Cisse, A. Malafosse (Switzerland) 86

Changes in presynaptic proteins, SNAP-25 and synaptophysin, in the hippocampal CA1 area in ischemic gerbils
H. Ishimaru, F. Casamenti, K. Uéda, Y. Maruyama, G. Pepeu (Italy, Japan) 94

Dopamine output in the nucleus accumbens shell is related to the acquisition and the retention of a motivated appetitive behavior in rats
F. Masi, S. Scheggi, S. Mangiavacchi, P. Tolu, A. Tagliamonte, M.G. De Montis, C. Gambarana (Italy) 102

Secondary somatosensory cortex stimulation facilitates the antinociceptive effect of the NO synthase inhibitor through suppression of spinal nociceptive neurons in the rat
R. Kuroda, N. Kawao, H. Yoshimura, W. Umeda, M. Takemura, Y. Shigenaga, A. Kawabata (Japan) 110

Central representation of the sympathetic nervous system in the cerebral cortex
M.J. Westerhaus, A.D. Loewy (USA) 117

Expression and regulation of cholecystokinin and cholecystokinin receptors in rat nodose and dorsal root ganglia
C. Broberger, K. Holmberg, T.-J. Shi, G. Dockray, T. Hökfelt (Sweden, UK) 128

Metabolic mapping of brain regions associated with behavioral extinction in preweanling rats
H.P. Nair, J.D. Berndt, D. Barrett, F. Gonzalez-Lima (USA) 141

Tyrosine hydroxylase-immunoreactive projections from the caudal ventrolateral medulla to the subfornical organ in the rat
H. Kawano, S. Masuko (Japan) 154

(Contents continued inside)

0006-8993(20010608)903:1/2;1-Y

BRAIN RESEARCH

VOL. 903 NOS. 1,2 **CONTENTS** **8 JUNE 2001**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – EMBASE/Excerpta Medica – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Elsevier BIOBASE/Current Awareness in Biological Sciences. Full text available in ScienceDirect® and Neuroscion.

Announcements

Floyd E. Bloom appointed as Co-Editor-in-Chief of *Brain Research* v

Brain Research Interactive Young Investigator Awards vi

Brain Research Interactive Young Investigator Awards – October 2000 vii

Call for Papers – Gene Expression Patterns viii

Interactive report (Also accessible on the World Wide Web at **http://www.bres-interactive.com**)

Melatonin promotes sleep-like state in zebrafish
I.V. Zhdanova, S.Y. Wang, O.U. Leclair, N.P. Danilova (USA) 263

Research reports

Long-term alteration of calcium homeostatic mechanisms in the pilocarpine model of temporal lobe epilepsy
M. Raza, S. Pal, A. Rafiq, R.J. DeLorenzo (USA) 1

Par-4 is a synaptic protein that regulates neurite outgrowth by altering calcium homeostasis and transcription factor AP-1 activation
Q. Guo, J. Xie, X. Chang, X. Zhang, H. Du (USA) 13

Cellular mRNA expression of the transcription factor NGFI-B suggests a gene regulatory role in striatal opiate-peptide neurons
C. Bäckman, B.J. Hoffer, H. Misawa, M. Morales (USA, Japan) 26

Separate urinary bladder and external urethral sphincter neurons in the central nervous system of the rat: simultaneous labeling with two immunohistochemically distinguishable pseudorabies viruses
I. Nadelhaft, P.L. Vera (USA) 33

Regional expression of Bcl-2 mRNA and mitochondrial cytochrome *c* release after experimental brain injury in the rat
G.-X. Dong, D.K. Singh, P. Dendle, R.M. Prasad (USA) 45

Brainstem activates paroxysmal discharge in human generalized epilepsy
S. Kohsaka, M. Kohsaka, S. Mizukami, T. Sakai, K. Kobayashi (Japan) 53

Naloxone inhibits nicotine-induced receptor current and catecholamine secretion in bovine chromaffin cells
A.R. Tomé, V. Izaguirre, L.M. Rosário, V. Ceña, C. González-García (Portugal, Spain) 62

Co-involvement of mitochondria and endoplasmic reticulum in regulation of apoptosis: changes in cytochrome *c*, Bcl-2 and Bax in the hippocampus of aluminum-treated rabbits
O. Ghribi, D.A. DeWitt, M.S. Forbes, M.M. Herman, J. Savory (USA) 66

Nitric oxide synthase inhibitors enhance mechanosensitive Ca^{2+} influx in cultured dorsal root ganglion neurons
V.V. Chaban, J.A. McRoberts, H.S. Ennes, E.A. Mayer (USA) 74

A non-radioactive assay for the cAMP-dependent protein kinase activity in rat brain homogenates and age-related changes in hippocampus and cortex
F. Karege, M. Schwald, C. Lambercy, J.-J. Murama, M. Cisse, A. Malafosse (Switzerland) 86

Changes in presynaptic proteins, SNAP-25 and synaptophysin, in the hippocampal CA1 area in ischemic gerbils
H. Ishimaru, F. Casamenti, K. Uéda, Y. Maruyama, G. Pepeu (Italy, Japan) 94

Dopamine output in the nucleus accumbens shell is related to the acquisition and the retention of a motivated appetitive behavior in rats
F. Masi, S. Scheggi, S. Mangiavacchi, P. Tolu, A. Tagliamonte, M.G. De Montis, C. Gambarana (Italy) 102

Secondary somatosensory cortex stimulation facilitates the antinociceptive effect of the NO synthase inhibitor through suppression of spinal nociceptive neurons in the rat
R. Kuroda, N. Kawao, H. Yoshimura, W. Umeda, M. Takemura, Y. Shigenaga, A. Kawabata (Japan) 110

Central representation of the sympathetic nervous system in the cerebral cortex
M.J. Westerhaus, A.D. Loewy (USA) 117

Expression and regulation of cholecystokinin and cholecystokinin receptors in rat nodose and dorsal root ganglia
C. Broberger, K. Holmberg, T.-J. Shi, G. Dockray, T. Hökfelt (Sweden, UK) 128

Metabolic mapping of brain regions associated with behavioral extinction in preweanling rats
H.P. Nair, J.D. Berndt, D. Barrett, F. Gonzalez-Lima (USA) 141

Tyrosine hydroxylase-immunoreactive projections from the caudal ventrolateral medulla to the subfornical organ in the rat
H. Kawano, S. Masuko (Japan) 154

(Contents continued inside)

0006-8993(20010608)903:1/2;1-Y

(contents continued)

Kindling of the midbrain periaqueductal gray in rats
N. Omori, T. Ishimoto, F. Mutoh, S. Chiba (Japan) 162

Organization of projections from the medial agranular cortex to the superior colliculus in the rat: a study using anterograde and retrograde tracing methods
T. Tsumori, S. Yokota, K. Ono, Y. Yasui (Japan) 168

(*S*)-4C3HPG, a mixed group I mGlu receptor antagonist and a group II agonist, administered intrastriatally, counteracts parkinsonian-like muscle rigidity in rats
E. Lorenc-Koci, J. Wardas, S. Wolfarth, A. Pilc (Poland) 177

Axonal elongation through long acellular nerve segments depends on recruitment of phagocytic cells from the near-nerve environment. Electrophysiological and morphological studies in the cat
J. Sørensen, K. Fugleholm, M. Moldovan, H. Schmalbruch, C. Krarup (Denmark) 185

Firing patterns of pre-Bötzinger and Bötzinger neurons during hypocapnia in the adult rat
Q.-J. Sun, A.K. Goodchild, P.M. Pilowsky (Australia) 198

Stimulation of astrocyte-enriched culture with C2 ceramide increases proenkephalin mRNA: involvement of cAMP-response element binding protein and mitogen activated protein kinases
J.-S. Won, M.-R. Choi, H.-W. Suh (South Korea) 207

Short communications

Opioid neurotransmission in the post-ictal analgesia: Involvement of μ_1-opioid receptor
N.C. Coimbra, R.L. Freitas, M. Savoldi, C. Castro-Souza, E.N. Segato, R. Kishi, A. Weltson, G.C.C. Resende (Brazil) 216

Effects of riluzole on *N*-methyl-D-aspartate-induced tyrosine phosphorylation in the rat hippocampus
A. Peyclit, H. Keita, P. Juvin, P. Derkinderen, F. Jardinaud, D. Rouellé, J. Boczkowski, J.-M. Desmonts, J.-A. Girault, J. Mantz (France) 222

Cholinergic- and stress-induced signaling activities in cells overexpressing wild-type and mutant presenilin-1
P. De Sarno, M. Lesort, G.N. Bijur, G.V.W. Johnson, R.S. Jope (USA) 226

Distribution of various calcium channel α_1 subunits in murine DRG neurons and antinociceptive effect of ω-conotoxin SVIB in mice
M. Murakami, T. Suzuki, O. Nakagawasai, H. Murakami, S. Murakami, A. Esashi, R. Taniguchi, T. Yanagisawa, K. Tan-No, I. Miyoshi, H. Sasano, T. Tadano (Japan) 231

Towards micro electrode implants: in vitro guidance of rat spinal cord neurites through polyimide sieves by Schwann cells
B. Schlosshauer, T. Brinker, H.-W. Müller, J.-U. Meyer (Germany) 237

Changes in defensive behaviors following olfactory bulbectomy in male and female rats
H.S. Stock, G.A. Hand, K. Ford, M.A. Wilson (USA) 242

Differential alterations in the distribution of voltage-gated calcium channels in aged rat cerebellum
Y.H. Chung, C.-m. Shin, M.J. Kim, D.H. Shin, Y.B. Yoo, C.I. Cha (South Korea) 247

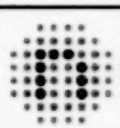
Time dependent amelioration against ischemic brain damage by glial cell line-derived neurotrophic factor after transient middle cerebral artery occlusion in rat
W.R. Zhang, T. Hayashi, M. Iwai, I. Nagano, K. Sato, Y. Manabe, K. Abe (Japan) 253

Hypocretin (orexin) input to trigeminal and hypoglossal motoneurons in the cat: a double-labeling immunohistochemical study
S.J. Fung, J. Yamuy, S. Sampogna, F.R. Morales, M.H. Chase (USA) 257

Erratum

PET neuroimaging of clomipramine challenge in humans: focus on the thalamus [Brain Research 892 (2001) 193–197]
D.F. Smith, J. Geday (Denmark) 269

Author index 270



neuroscion
a meeting of minds

To view articles from this journal, visit Neuroscion, the comprehensive neuroscience information service on the web.

Register today at **www.neuroscion.com**